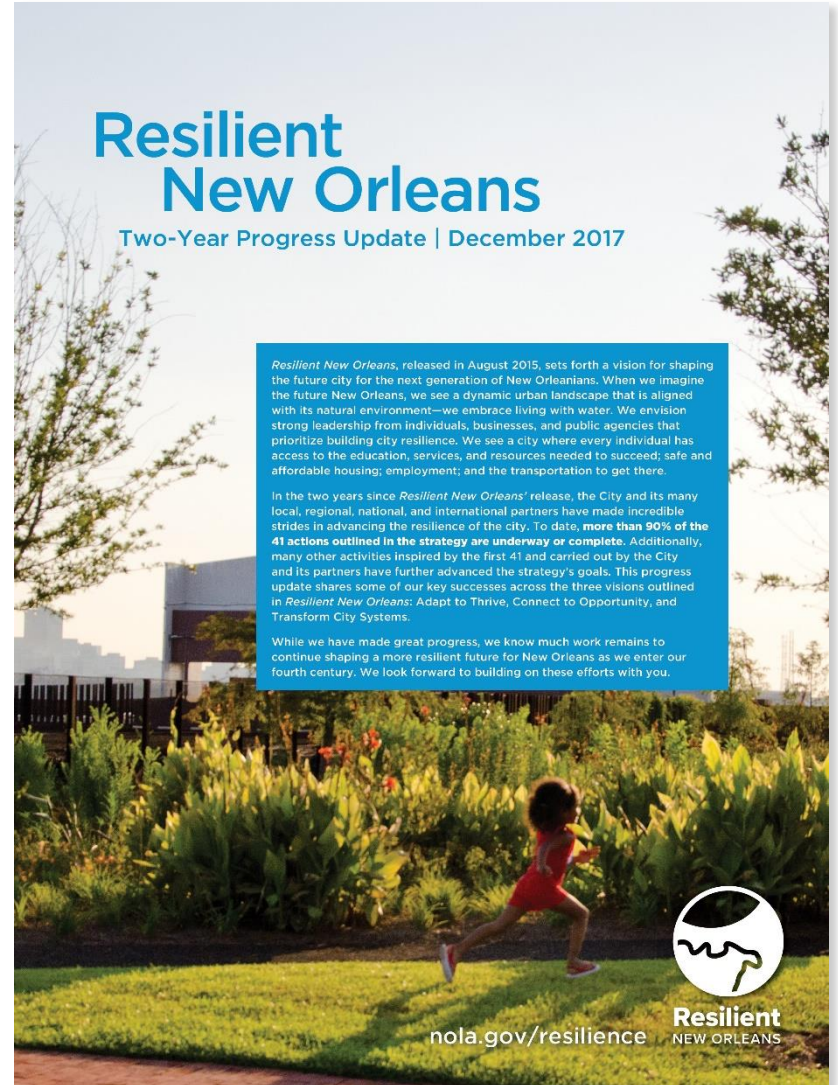
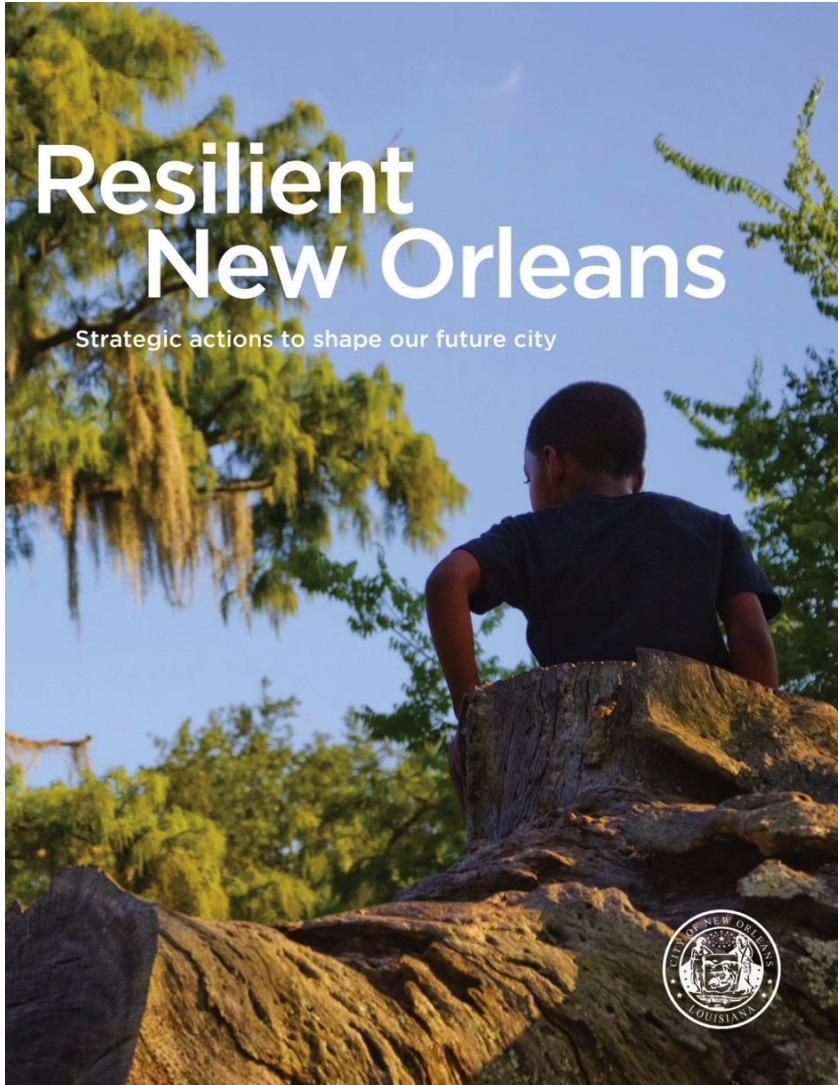


New Orleans City Resilience Strategy

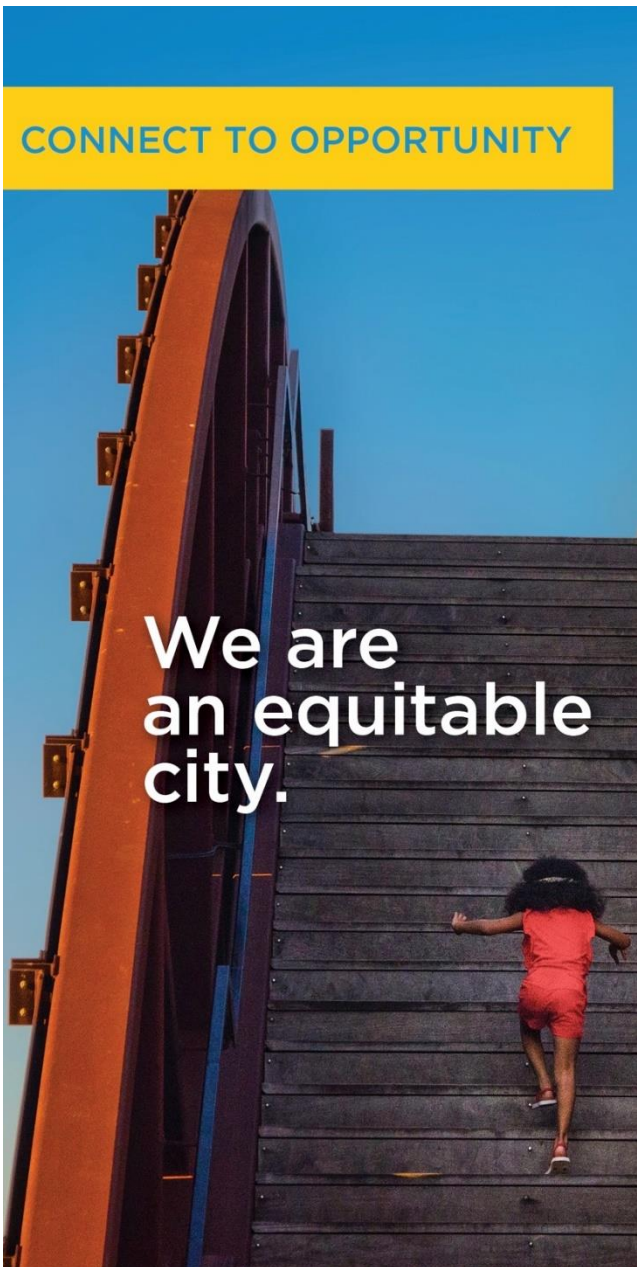
2-Year Progress Update





ADAPT TO THRIVE

We are
a city that
embraces
our changing
environment.



CONNECT TO OPPORTUNITY

We are
an equitable
city.



TRANSFORM CITY SYSTEMS

We are a
dynamic and
prepared
city.

Resilience Dividend: Designing for multiple benefits



Gentilly Resilience District



Parks & Playgrounds



Vacant Lots



Streets & Corridors

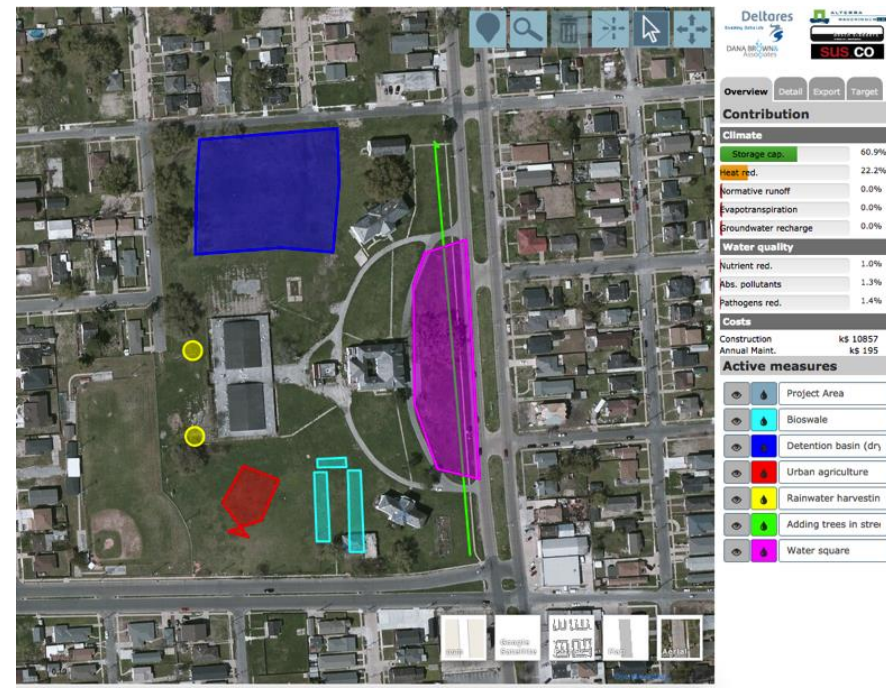
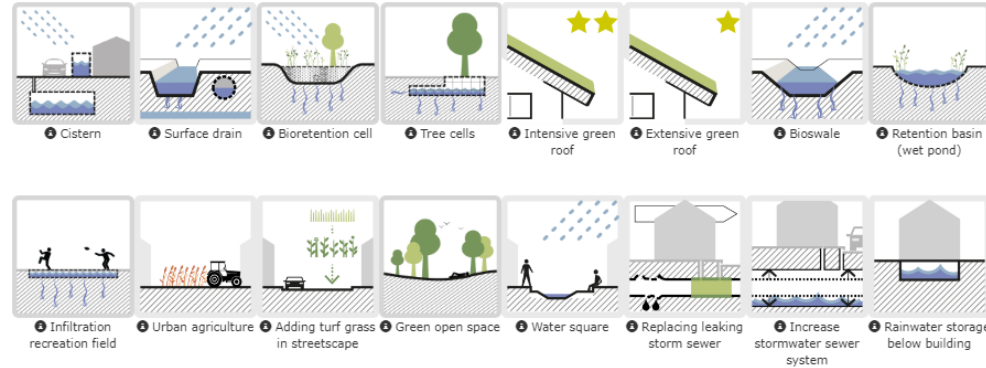
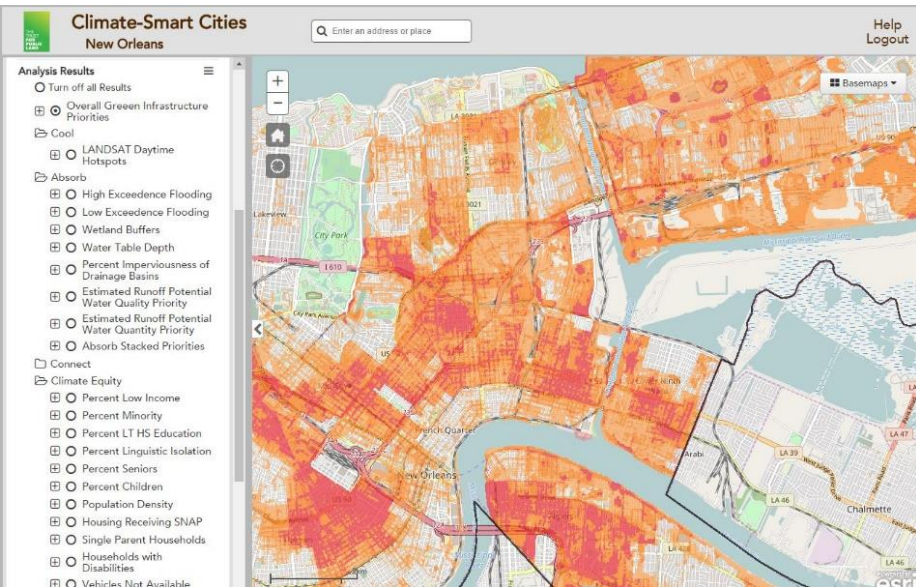


Open Spaces



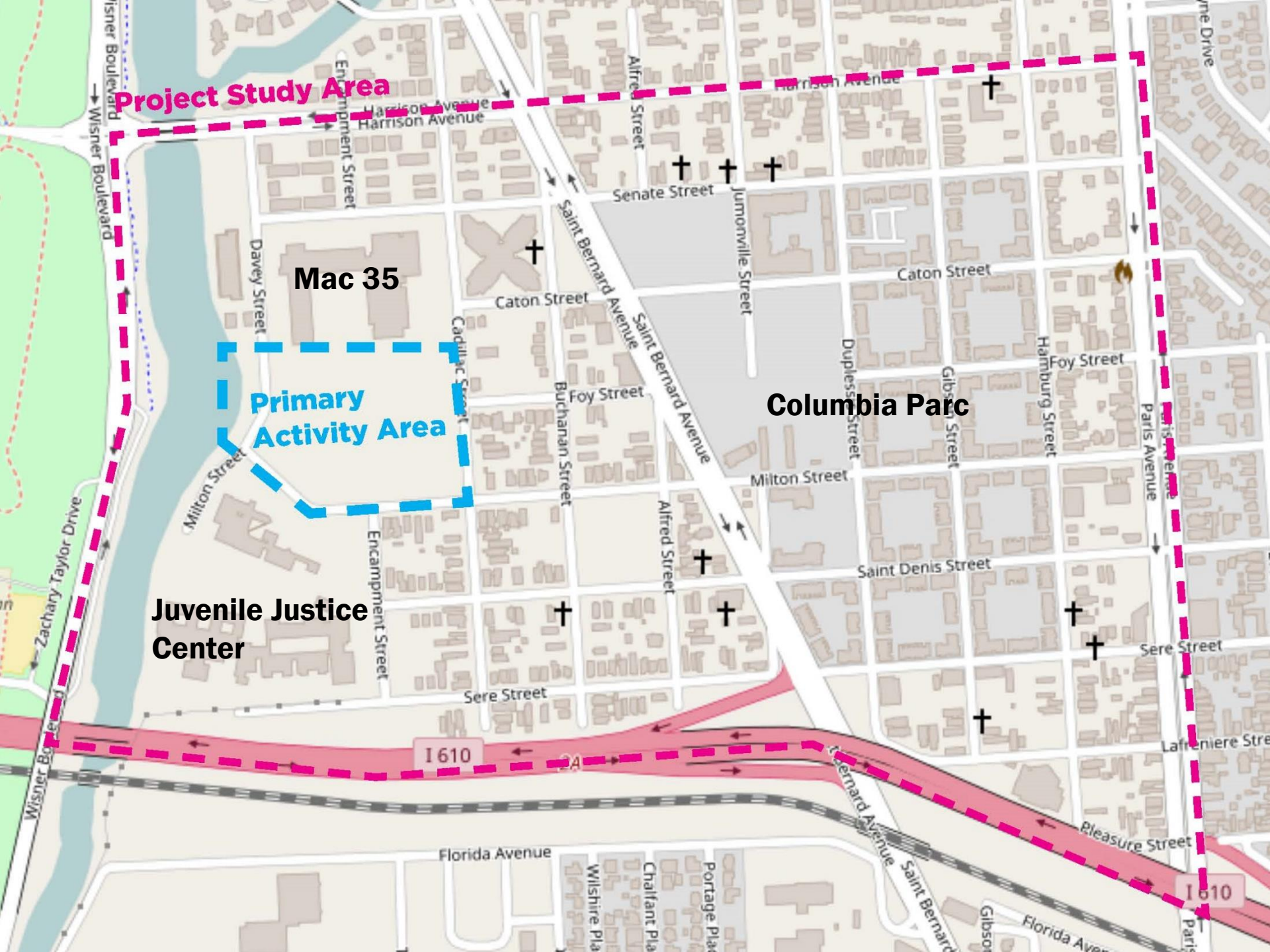
Home & Property Improvements

Climate-Ready Planning Tools using data and science to engage residents and stakeholders



Project Locations





Project Study Area

Mac 35

Primary Activity Area

Juvenile Justice Center

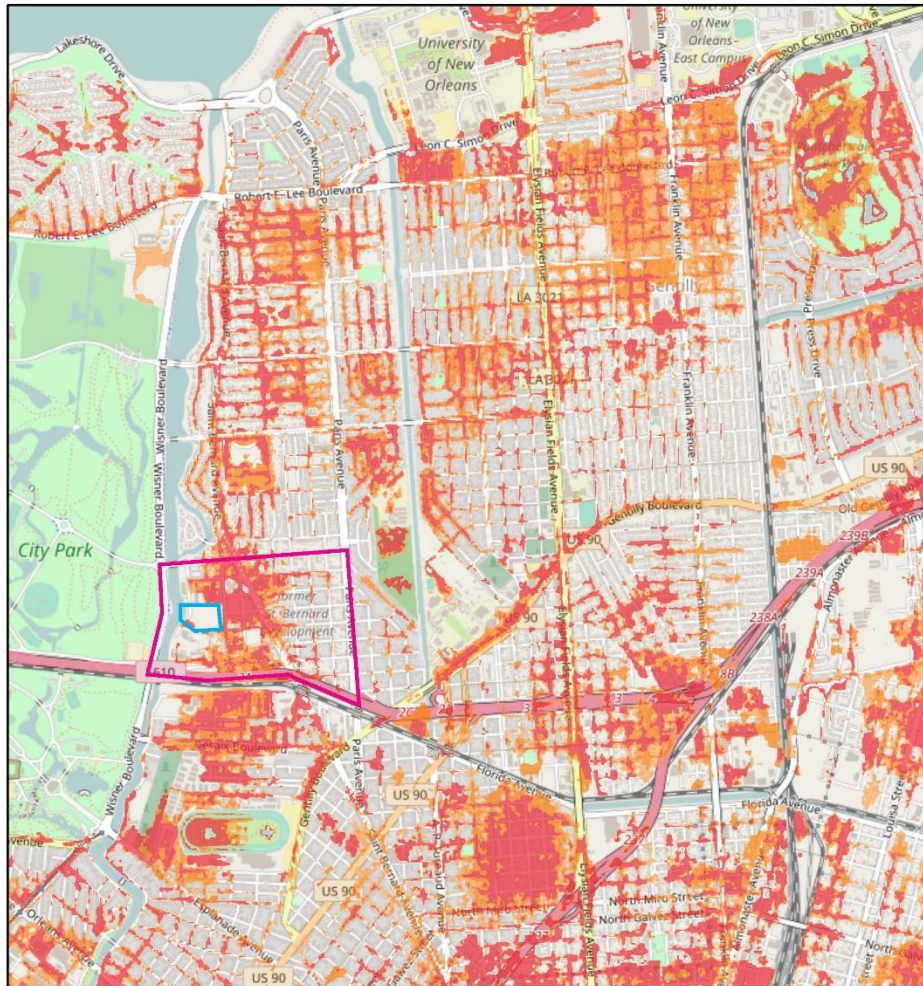
Columbia Parc

1610

1A

1610

High Exceedence Flooding - St. Bernard



August 11, 2017

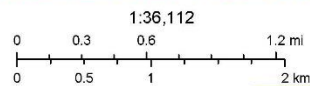
City Boundary

High Exceedence Flooding

Very high

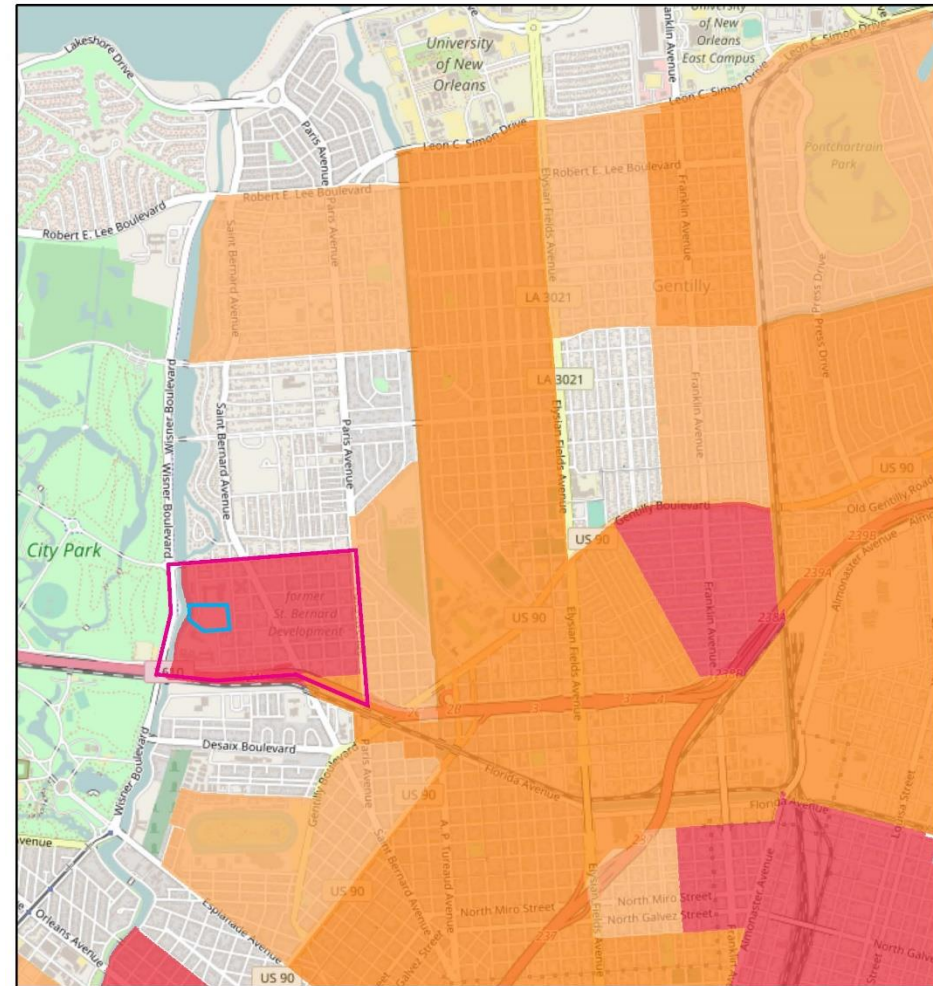
High

Moderate



The Trust for Public Land
Copyright 2017

Health Priorities - St. Bernard



August 11, 2017

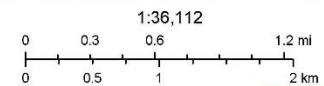
City Boundary

Overall Health Priorities

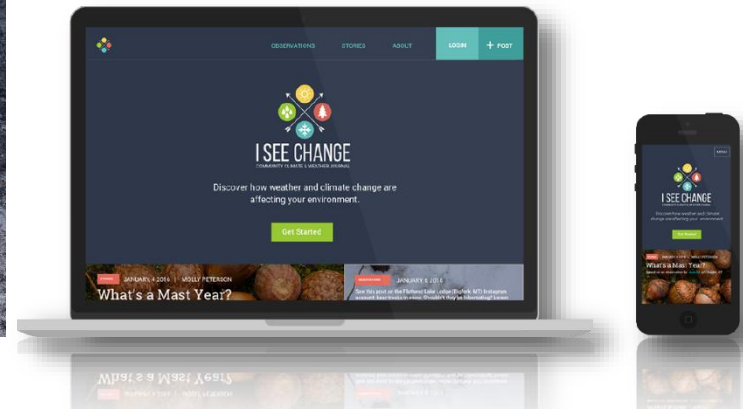
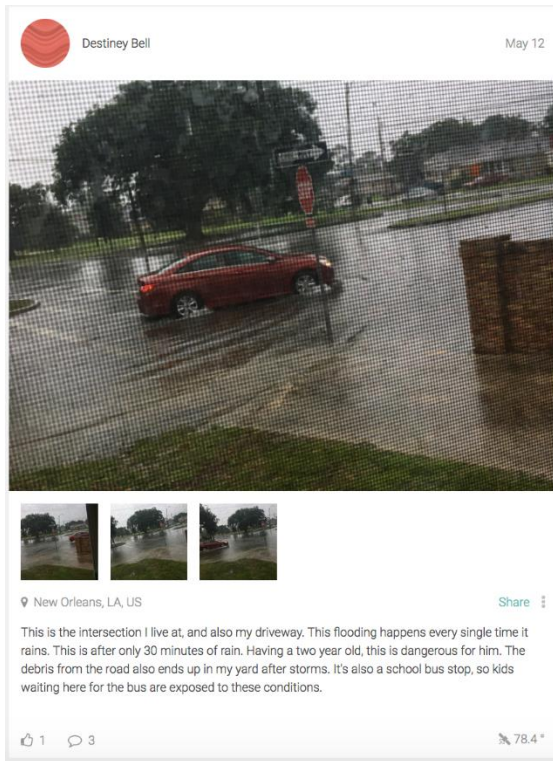
Very high

High

Moderate



The Trust for Public Land
Copyright 2017



Energy Efficiency

December 2nd, 2017

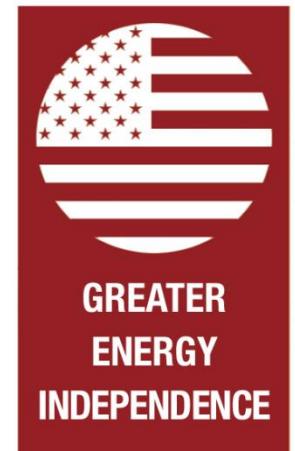


Saving Energy = Saving \$



Resilient
NEW ORLEANS

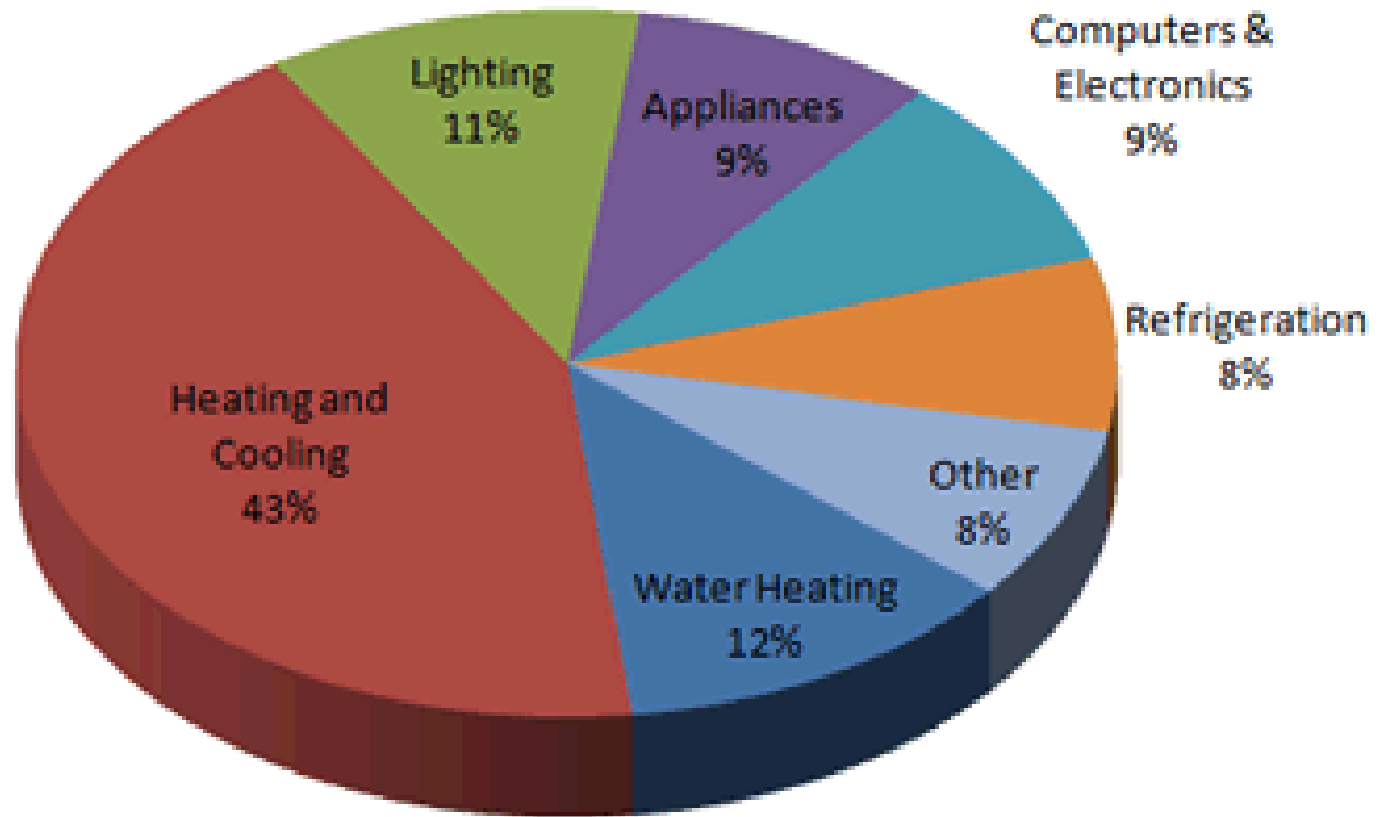
BENEFITS OF ENERGY EFFICIENCY



created by element print & design



What Makes Up Your Electric Bill



Source: Your Home's Energy Use, EnergySavers.gov



Energy efficiency saves money!

- The average U.S. household spends \$5,550/year on energy.
- Buying ENERGY STAR appliances saves up to 30% on electricity bills.
- Replacing incandescent light bulbs with energy-efficient halogens, CFLs or LEDs saves 30-80% on energy bills.

Other Benefits

- Increases comfort
- Improves the function / longevity of a building's systems
- Increases property value
- Is a good return on investment
- Contributes towards national security
- Improves productivity





Energy Smart



Resilient
NEW ORLEANS

Residential Rebates

Spend less money to save even more. That's really smart.



Want to lower your bill even more? Upgrade existing equipment in your home to qualifying ENERGY STAR® models. Rebates for projects may include:

- **Central A/C**
Up to \$200 rebate per system.
- **Air Source Heat Pump**
Up to \$250 rebate per system.
- **Mini-split (Ductless Heat Pump)**
Up to \$500 rebate per system.
- **Attic Insulation**
Up to \$.40 per sq. ft.
- **Air Infiltration**
Average \$250 per home for 650 CFM50 reduction.
- **Duct Sealing**
Average \$400 per home for 200 CFM25 reduction.

Receive **up to \$5,000** toward your home energy improvements.
Call **504-229-6868** or visit **energysmartnola.com** for a list of participating retail locations and contractors.



Energy Smart is a comprehensive energy efficiency program developed by the New Orleans City Council and administered by Entergy New Orleans, Inc.
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www.energysmartnola.com

Lighting & Appliance Rebates

**Get free products that save energy.
Now that's smart.**

Improve the efficiency and comfort of your home with help from Energy Smart. Simply sign up for your free home energy assessment and we'll come out to you. You'll receive no-obligation recommendations and **FREE** installation of energy-saving products, such as:



LED
light bulbs



Faucet
aerators



Low-flow
showerheads

Schedule your appointment today.
Call **504-229-6868** or visit **energysmartnola.com**.



Energy Smart is a comprehensive energy efficiency program developed by the New Orleans City Council and administered by Entergy New Orleans, Inc.

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www.energysmartnola.com

Energy Smart for Businesses



Small Commercial Solutions

- Average peak demand of less than 100 kW.
- Incentives are based on approximately \$0.12 per kWh saved for all upgrades.



Large Commercial Solutions

- Average peak demand of 100 kW.
- Incentives are based on approximately \$0.10/kWh saved for lighting projects, and \$0.12/kWh saved for non-lighting projects.



Publicly Funded Institutions

- Provides technical assistance and financial incentives to publicly funded institutions (i.e., government buildings, public schools, etc.).
- Average peak demand of 100 kW or more.
- Incentives are based on approximately \$0.10/kWh saved for lighting projects, and \$0.12/kWh saved for non-lighting projects.

Participants can receive up to:

- \$50,000 for lighting.
- \$50,000 for non-lighting upgrades.
- Up to 100 percent of the project cost.

How do I participate?

1. Identify a project.
2. Submit an application.
3. Upon pre-approval, start your project.*
4. Submit project completion documentation.
5. A post-project site visit will be conducted by Energy Smart team.
6. Get paid.

*Pre-approval is required prior to any material purchases or installation.



Municipal Energy Upgrades



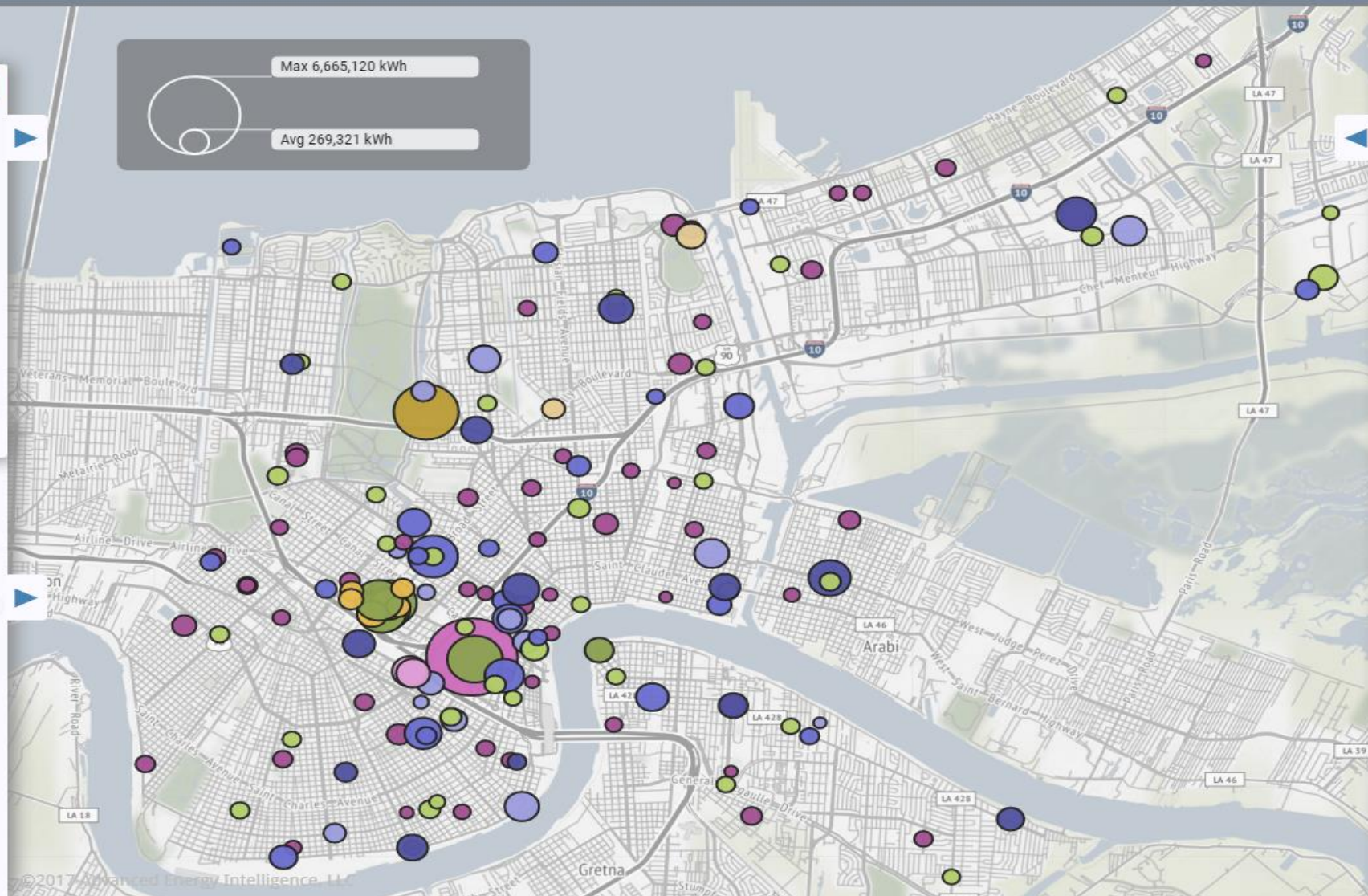
Resilient
NEW ORLEANS

For 92 Municipal Properties

- Conduct Energy Audits
- Building Automation System (BAS) review
- Provide retrocommissioning recommendations and cost estimates
- Meetings with facility maintenance staff on BAS oversight
- Ongoing engagement with facility staff about equipment programming
- Surveys of occupants regarding facility comfort / performance
- Ongoing support
 - Manual of equipment operations



nt ISO



View

- Size (Sq
- Capacit
- Electric
- ... (kWh
- ... (kW
- ... (\$/k
- ... (\$/ft²
- Natural
- Natural
- EUI (kB
- Water (
- Water (

Filters

Bill Pd Fro

2017-01

Search

Square Fee

EUI (kBtu/

Building Gr

Department

- CONO
- City Hai
- Corone
- NOFD
- NOJS
- NOMP
- NOPD
- NORD E
- NOWD
- OPSO
- Parks &

Reports

Select Rep

Go

Buildings / Occ / Cap

164 bldgs

0 / 0

= NaN% occ/cap

Floor Space

12,259,699 ft²

74,754 ft²/Bldg

Infinity ft²/cap

2016 Electricity

12,708.3 MWh

1.0 kWh/ft²/yr

2016 Water Usage

0.0 CCF/day

0.0 CCF/ft²/yr

2016 EUI

14.3 kBtu/ft²/yr

2016 GHG CO₂e

87.6 MtCO₂e/da

2.6 MtCO₂e/ft²/yr

Case Study: EMS/Coroner's Office

Coroner/EMS 🔍 ✎ ✕

On track to reduce energy usage by 15% over last year

View Data

Share

Add a Building

Total energy use ▼ in Btu per square foot ▼ showing all available data ▼

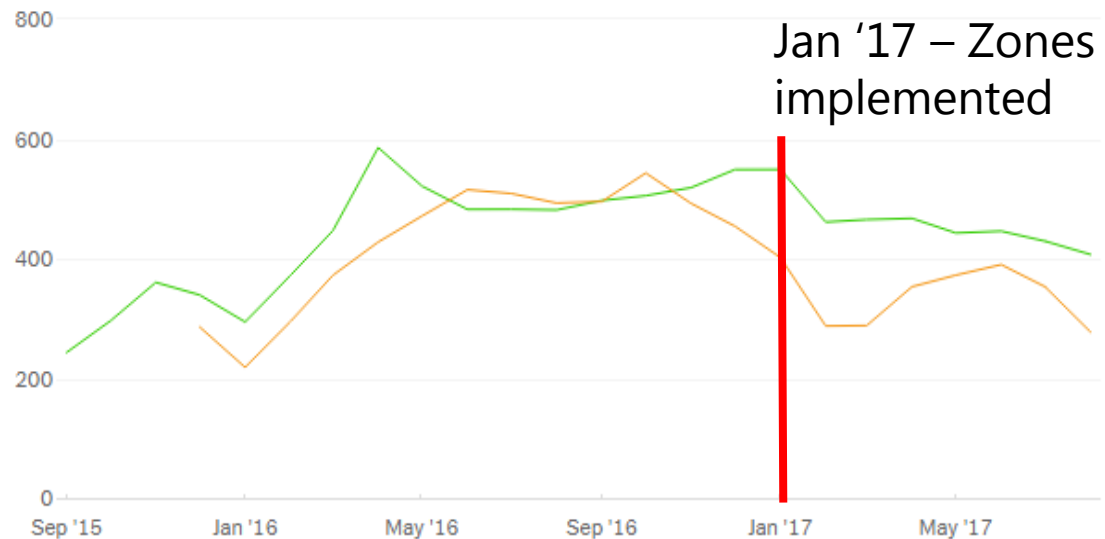
Graph ☒ Table



| Name | Full-Year Sum | |
|------------------|---------------|---|
| EMS Headquarters | 175k | ✓ |
| Coroner's Office | 143k | ✓ |

Detailed data per month

Click & drag to zoom in







DowntownNOLA
ENERGY CHALLENGE



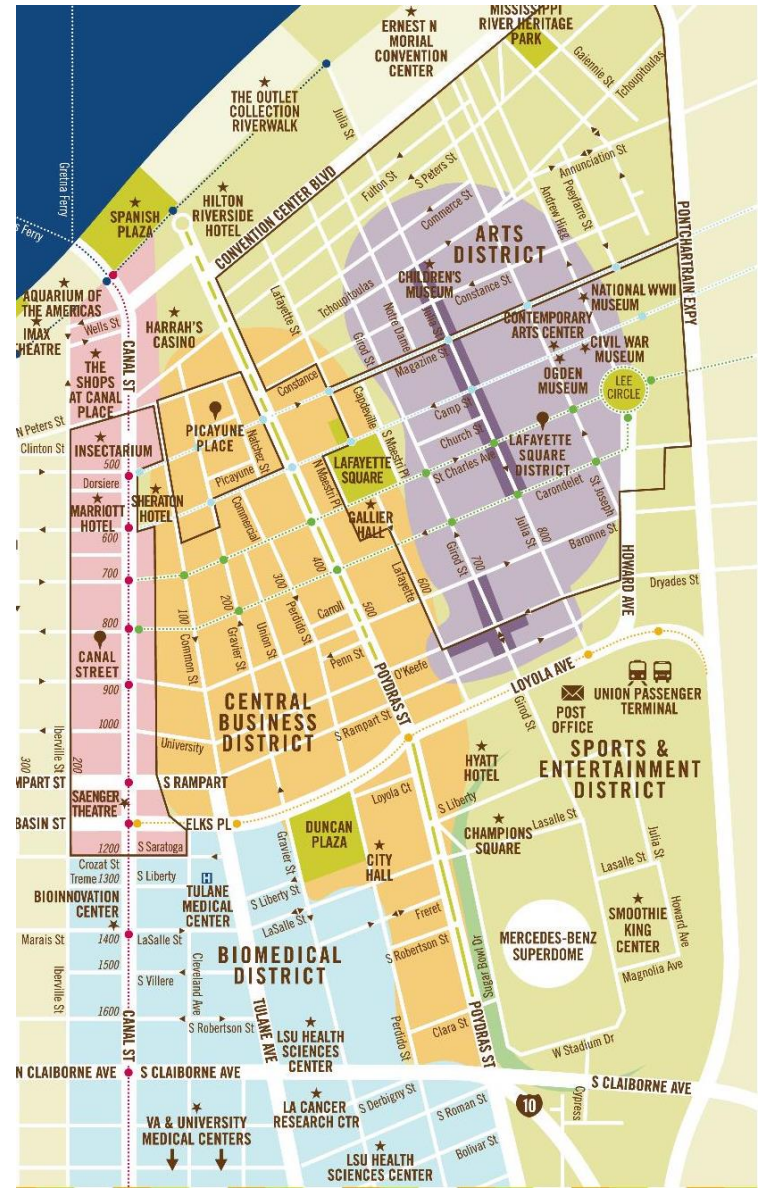
Resilient
NEW ORLEANS

Reduce Energy Use and Save Money

- Benchmark Energy Usage
- Track and Reduce Energy Usage over Time
- Move towards ENERGY STAR Certification



DowntownNOLA
ENERGY CHALLENGE



Property Owners / Managers



- Build their brand
- Improve bottom line and/or competitive edge
- Demonstrate leadership in sustainability
- Help make downtown a better place
- Assisted by partners within City Hall and throughout the city



DowntownNOLA
ENERGY CHALLENGE





- Receive free technical assistance and training
- Gain recognition at annual awards ceremony



DowntownNOLA
ENERGY CHALLENGE





Camille Pollan

Energy Efficiency Program Manager
Office of Resilience and Sustainability

City of New Orleans

nola.gov/resilience

cpollan@nola.gov

ofc: (504)658-8697

cell: (504)919-5338



Climate Action

for a Resilient New Orleans



50% by 2030



**Resilience +
Sustainability**
CITY OF NEW ORLEANS



July 2017

nola.gov/climateaction

Changing Climate, Changing City

Coastal cities most at risk from climate change

Sea level rise, extreme heat, more ferocious storms and extreme rainfall

We must reduce our contribution as we adapt to changes in our climate

Working together we can make a difference

Joining a global movement amplifies our local impact

More than 7500 cities worldwide - 300 nationwide

Growing regional leadership and opportunity

Climate action supports growth of jobs and businesses in our economy

Cities compete for talent, resources and this is an area we can lead

City leadership is critical to our success

New concepts in our community - change challenges us

Action reduces our risk and creates additional benefits

Greenhouse Gas (GHG) Inventory

Total 2014 GHG Pollution:

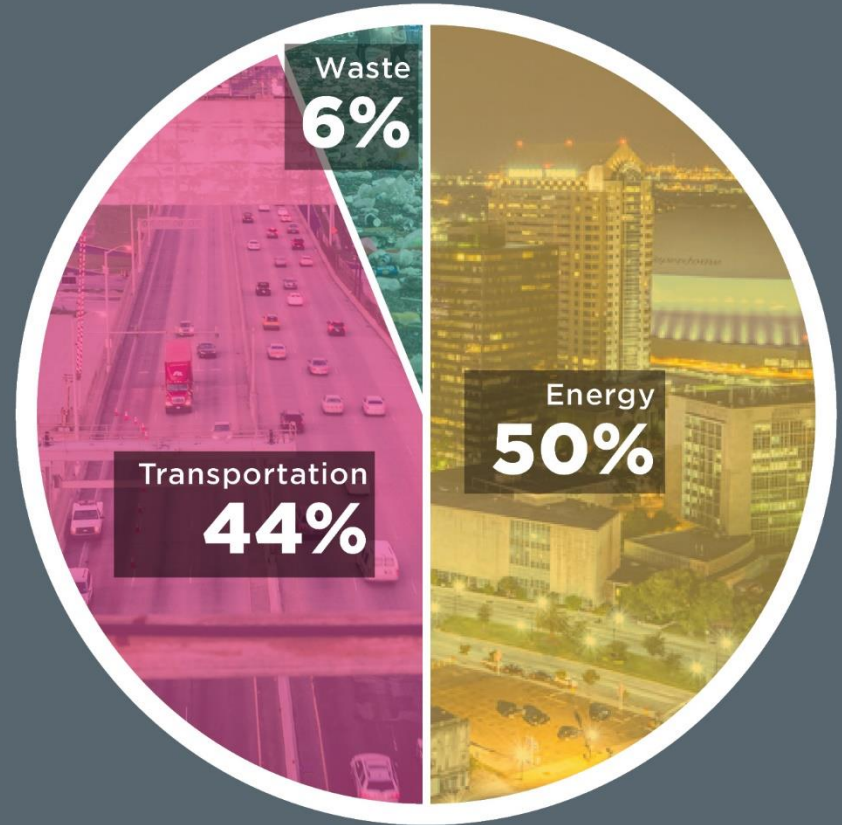
3,606,199

metric tons CO₂e

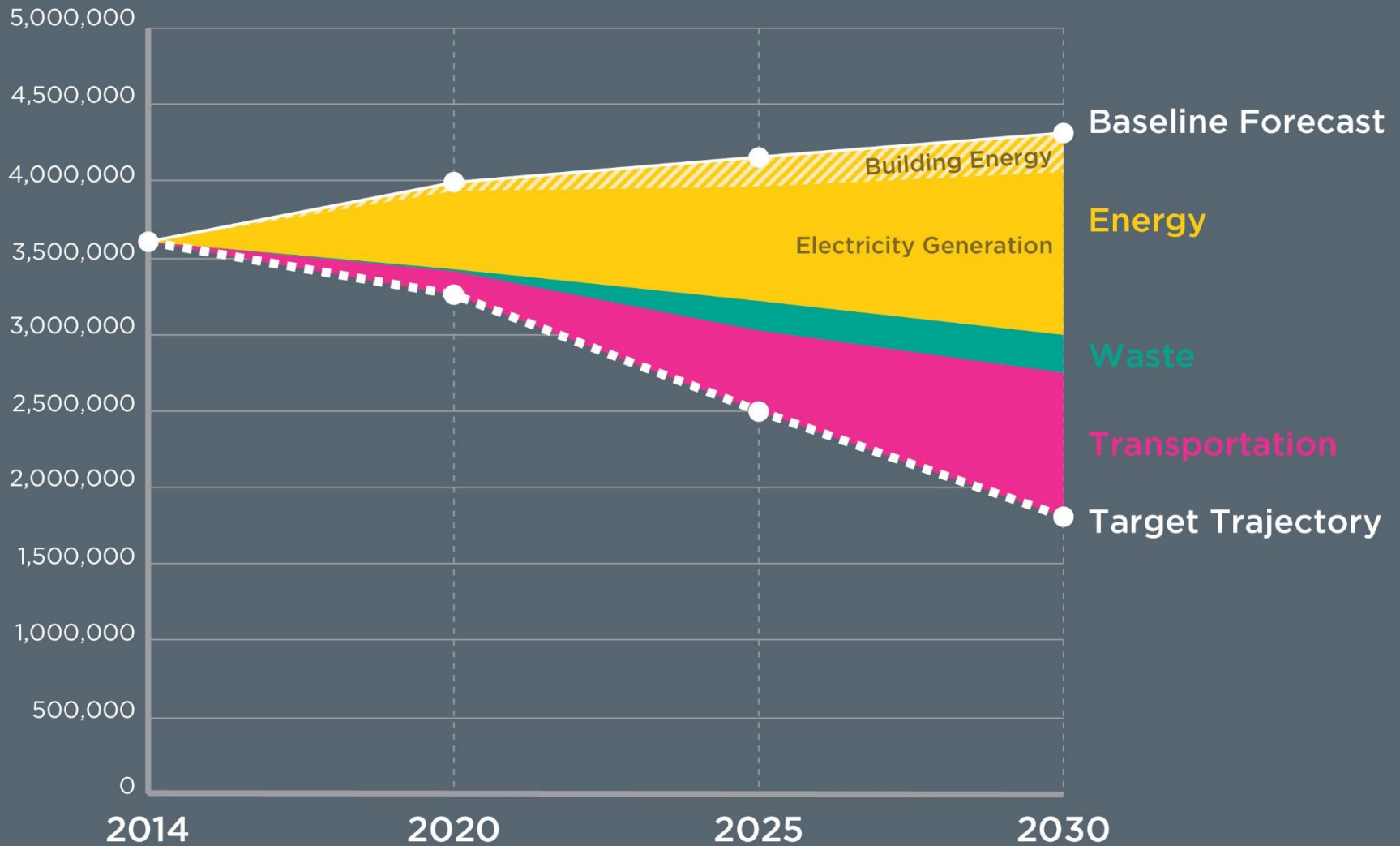
How we compare

Pollution Per Capita (metric tons)

| | |
|------------------------|-------------|
| Houston, TX | 15.22 |
| Portland, OR | 12.47 |
| Philadelphia, PA | 12.37 |
| Chicago, IL | 12.34 |
| Seattle, WA | 9.40 |
| New Orleans, LA | 9.38 |
| Los Angeles, CA | 8.31 |
| San Francisco, CA | 5.37 |



Getting to 50%: Actions add up





MODERNIZE OUR ENERGY USE

Strategies:

Reduce our reliance on carbon-intensive fuels

Save energy and make our savings a sustainable resource

Increase resilience of our energy, water, and sewer infrastructure

2030 Goals:

100% low-carbon power

255 megawatts local solar

3.3% annual energy savings

IMPROVE OUR TRANSPORTATION CHOICES

Strategies:

Transform infrastructure to reduce car dependence

Encourage active transportation

Increase fuel efficiency, clean fuel use, and shared-use mobility services

2030 Goals:

50% non-automobile trips



REDUCE OUR WASTE

Strategies:

Launch a comprehensive recycling and waste reduction initiative

Generate value from our waste

2030 Goals:

50% diverted from landfills by 2030

Zero Waste achieved by 2050

Support development of the
circular economy

CREATE A CULTURE OF AWARENESS & ACTION

Strategies:

Grow the local low-carbon economy

Enable data-driven decision making and collaboration

Connect culture and climate action

2030 Goals:

Increase **awareness** and **action** among residents, businesses, and visitors



Improving How We Move: Resilience in Mobility

Resilient & Equitable Transportation

Why Prioritize Walking, Biking and Transit

- Social mobility / Equity → • Lower-cost transportation
\$708 = average household vehicle costs
- Physical well-being → • Active transportation
- Environmental stewardship → • Low to zero emission
44% GHG emissions in city from transportation sector



Resilient & Equitable Transportation

Building a car optional city

\$60 per month



\$15 per month

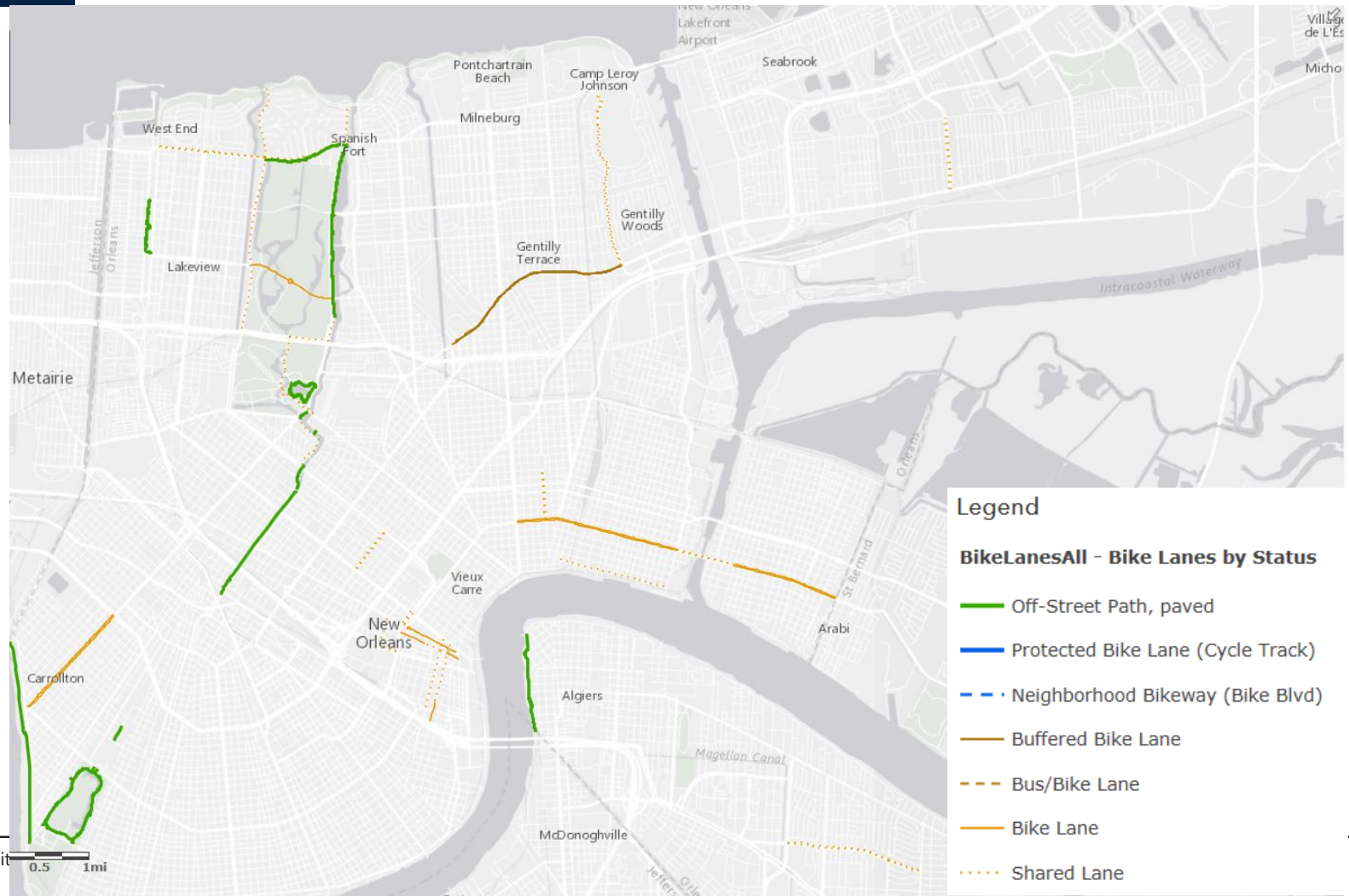


\$708 per month



How we got here

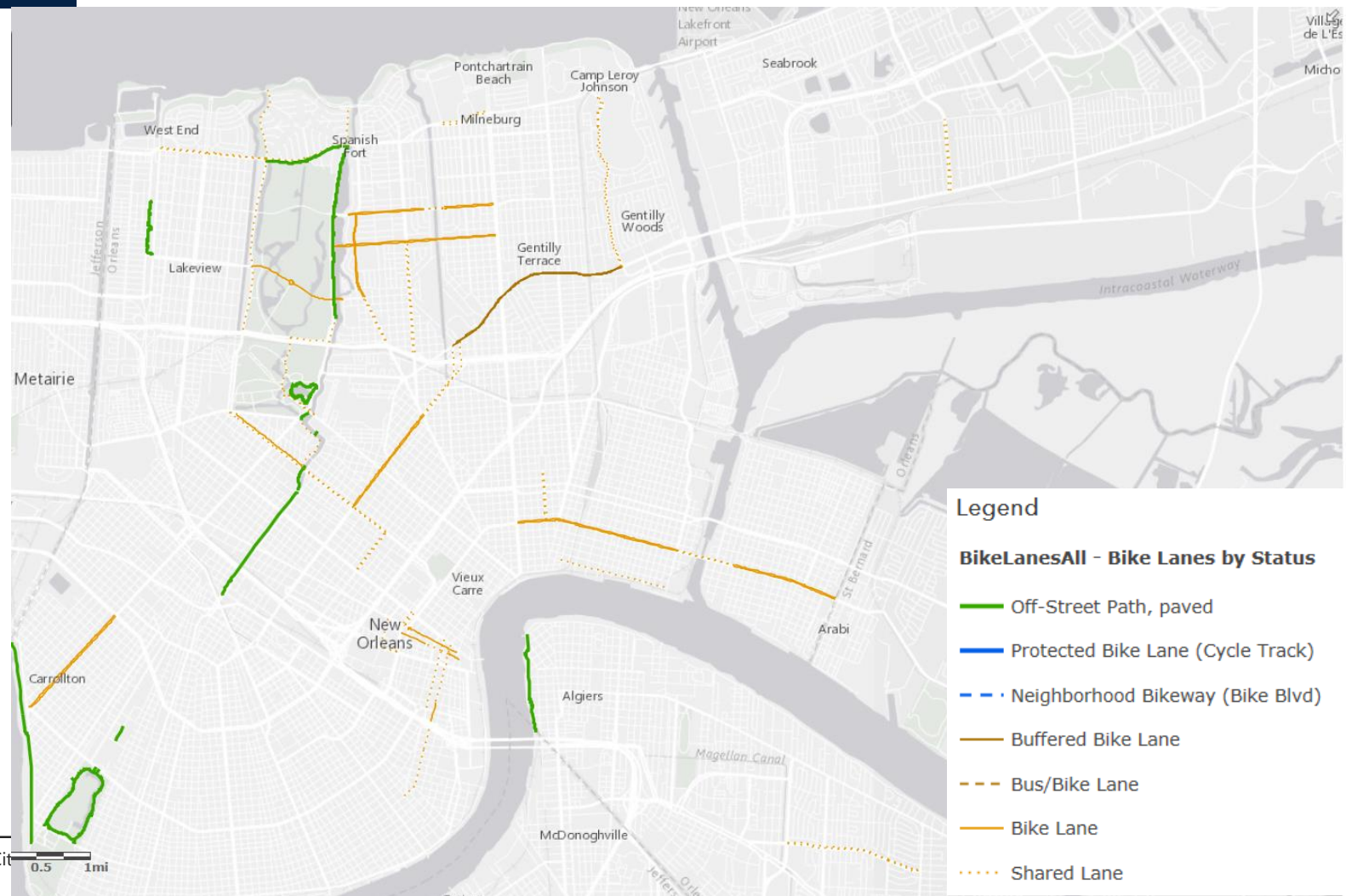
2010



City of New Orleans
0.5 1mi

How we got here

2011



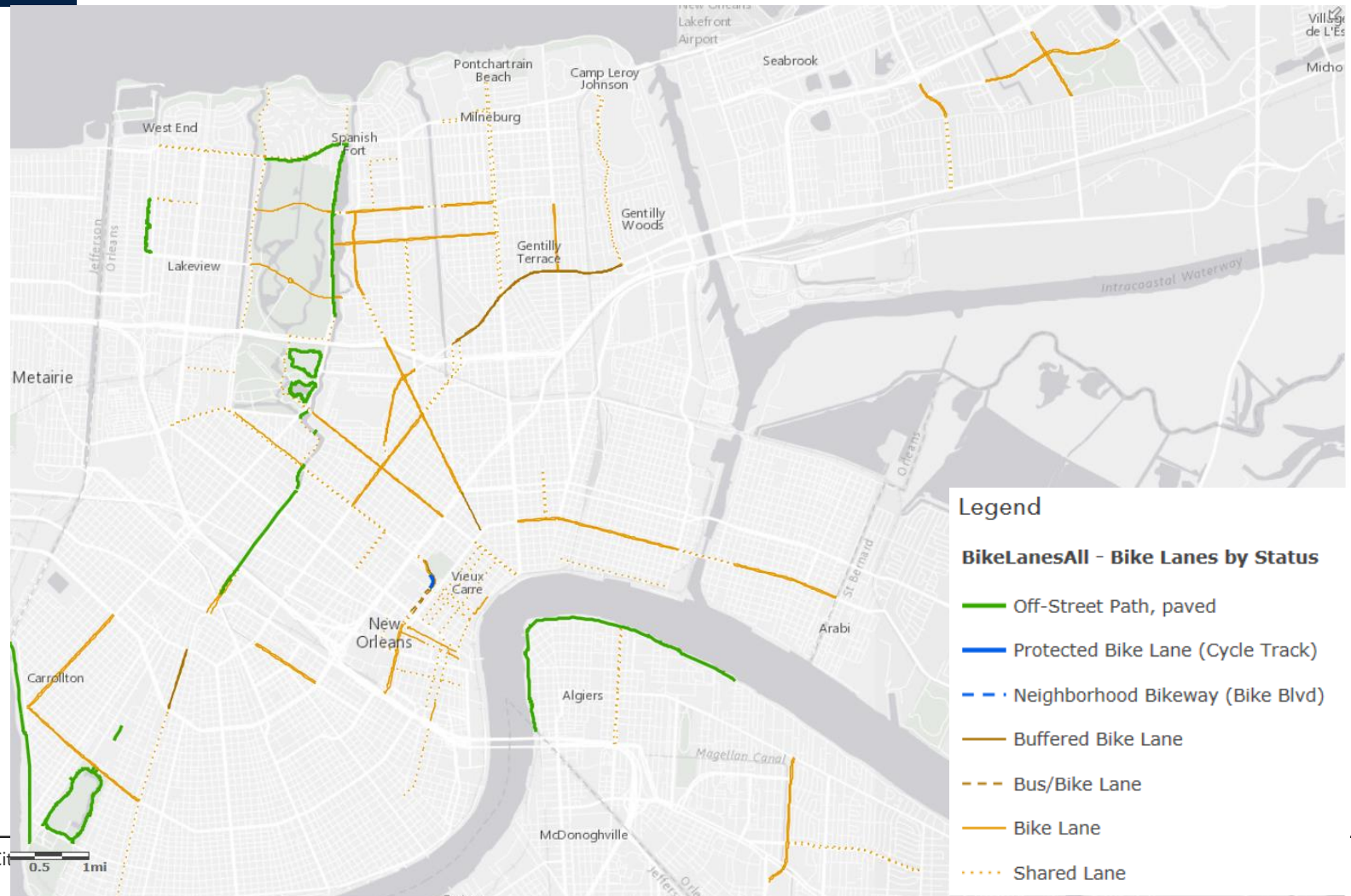
How we got here

2012



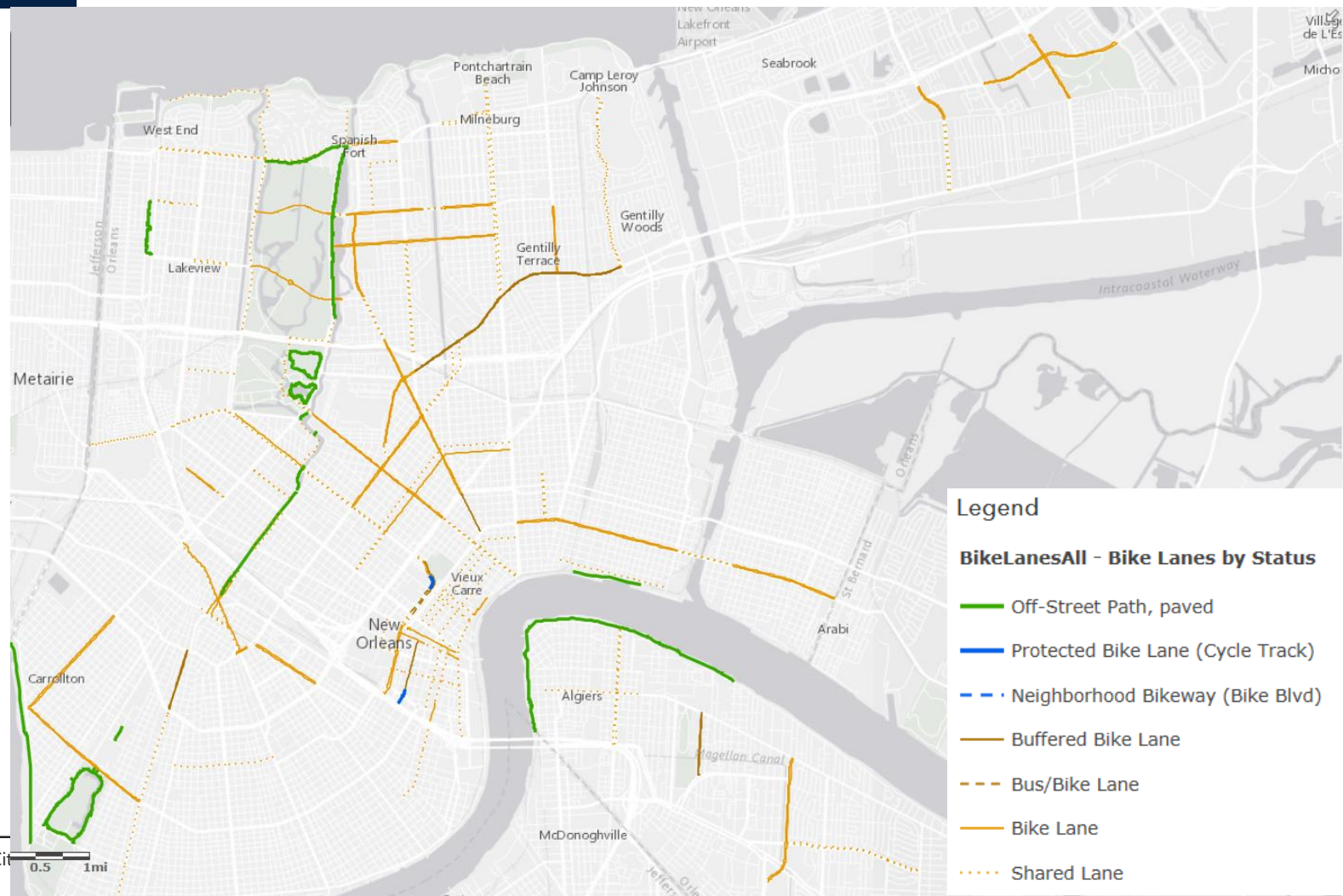
How we got here

2013



How we got here

2014



How we got here

2015



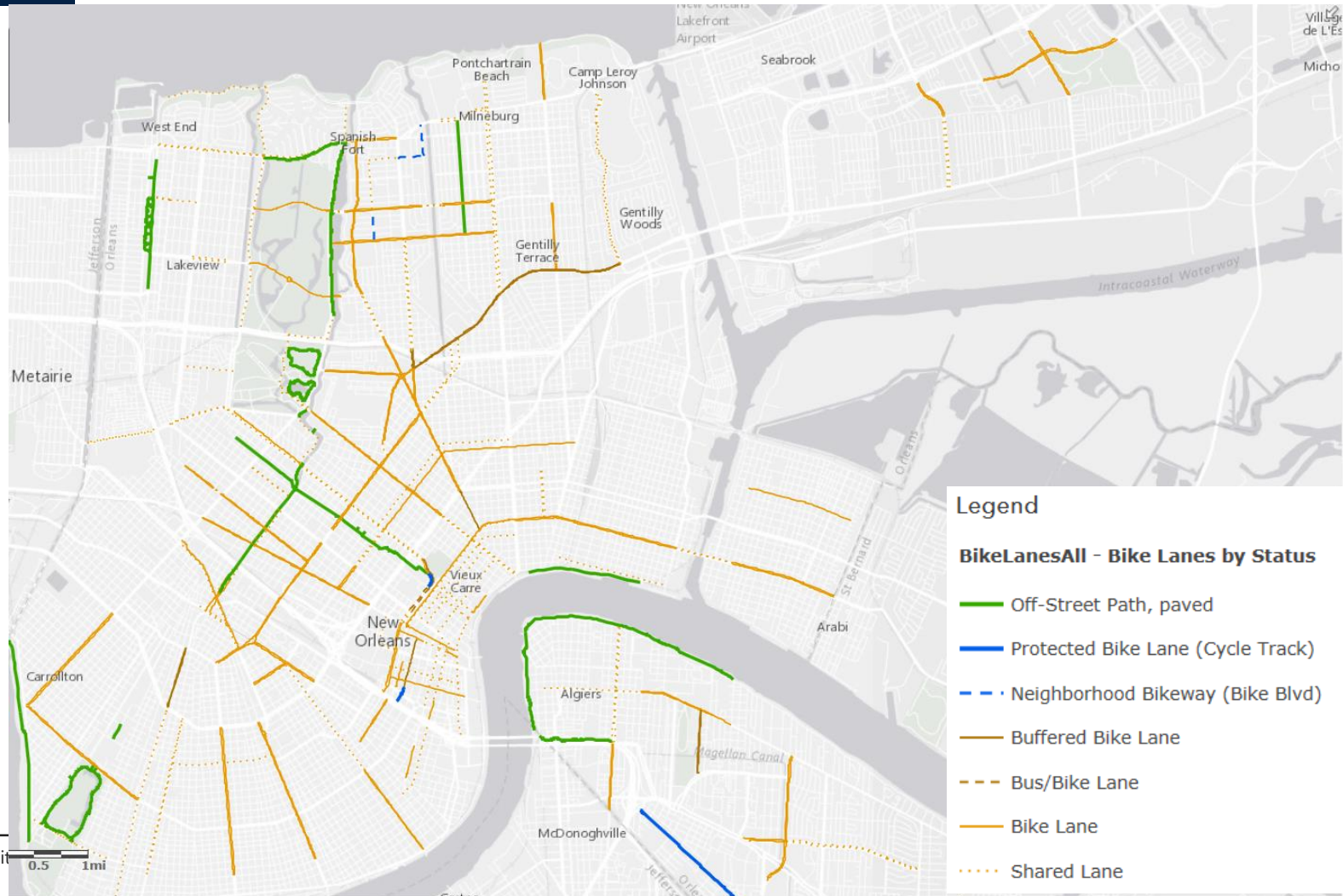
How we got here

2016



How we got here

Today (including design and under construction)



Where we want to go

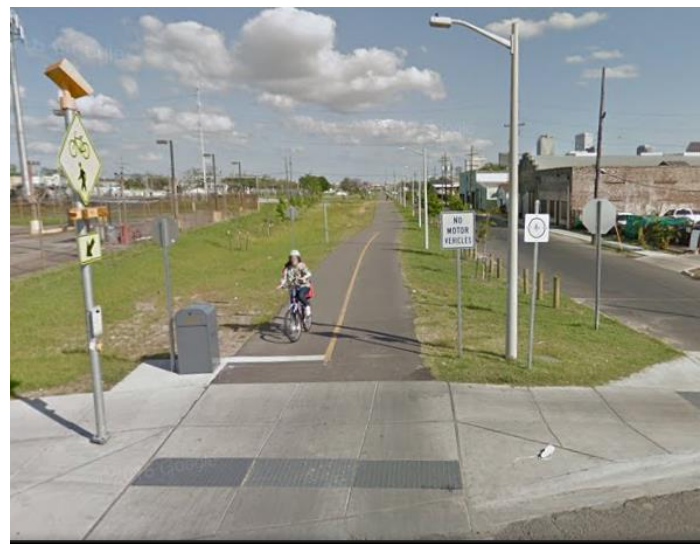
Not all infrastructure is created equal



Bike lane



Protected Bike Lane
(cycle track)



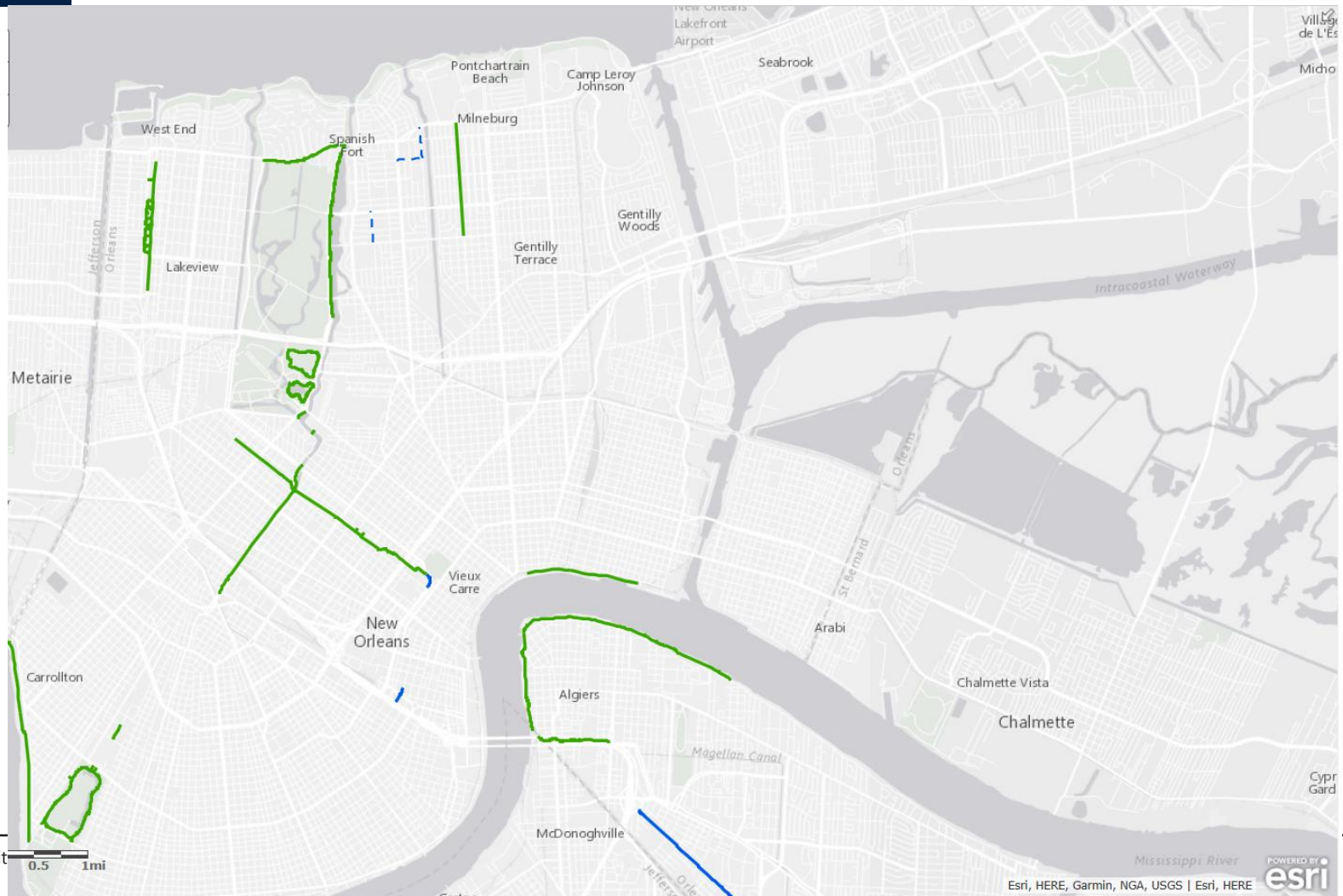
Off-street path
(shared-use path)

higher stress → *low stress* → *least stress*



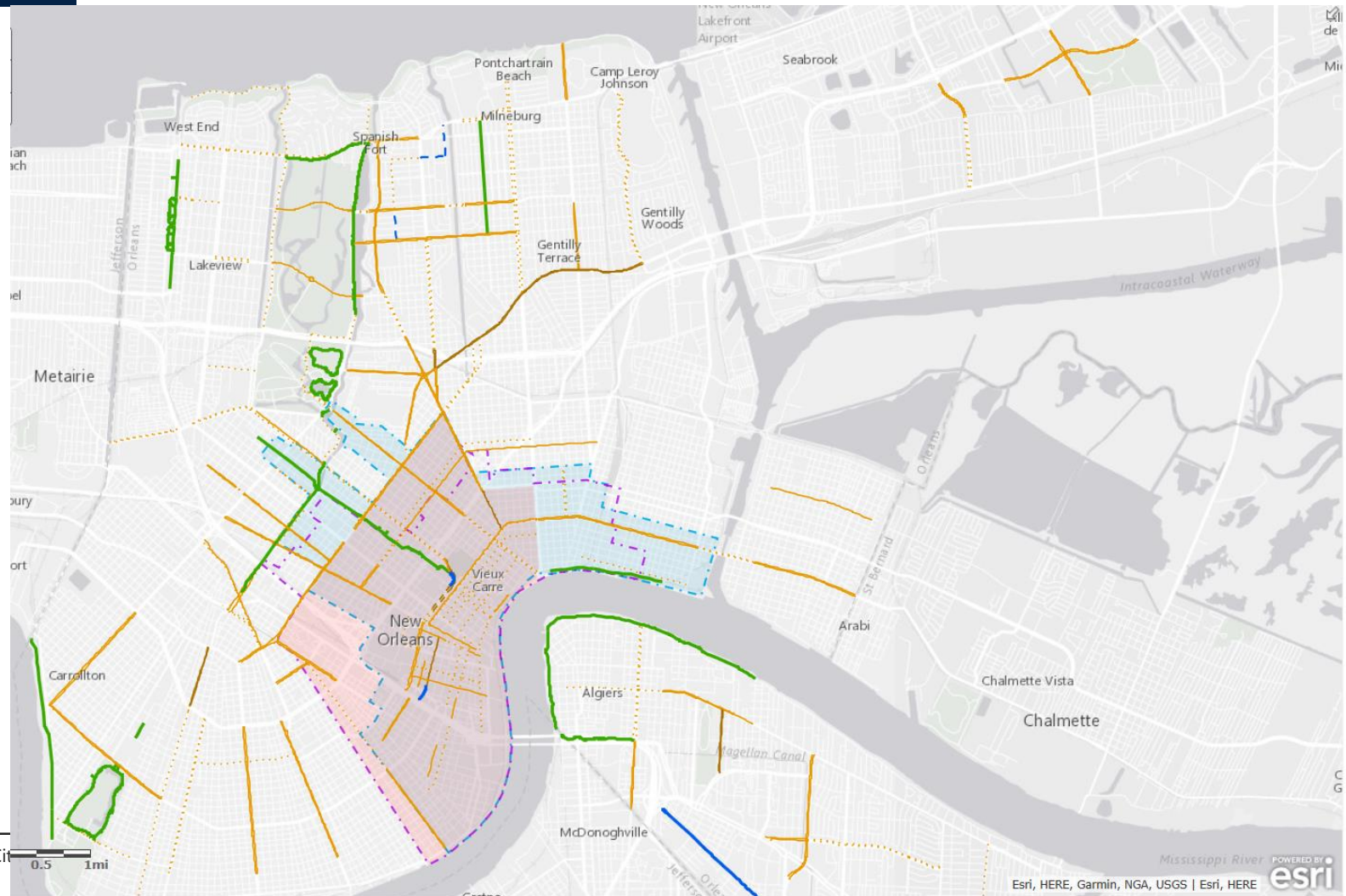
Where we want to go

Existing low-stress network



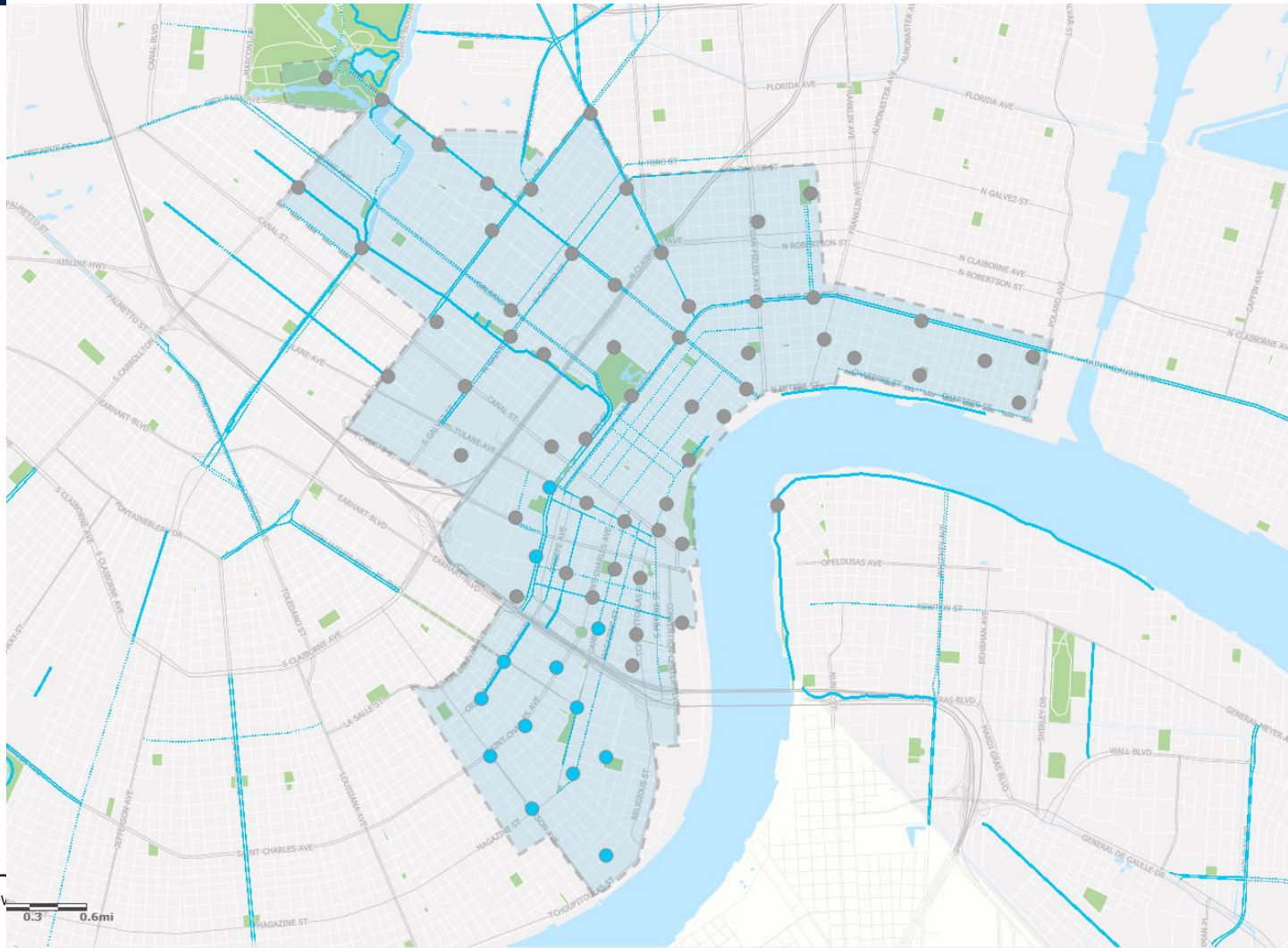
Where we want to go

Leverage multiple bicycle investments



Bike Share Overview

Phase 1 Service Area and Stations



An aerial photograph of New Orleans, Louisiana, is shown with a semi-transparent blue overlay. A white wavy line, resembling a stylized river or coastline, winds through the city. The words "RESILIENT" and "NOLA" are placed on this line.

RESILIENT NOLA

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nola.gov/resilience